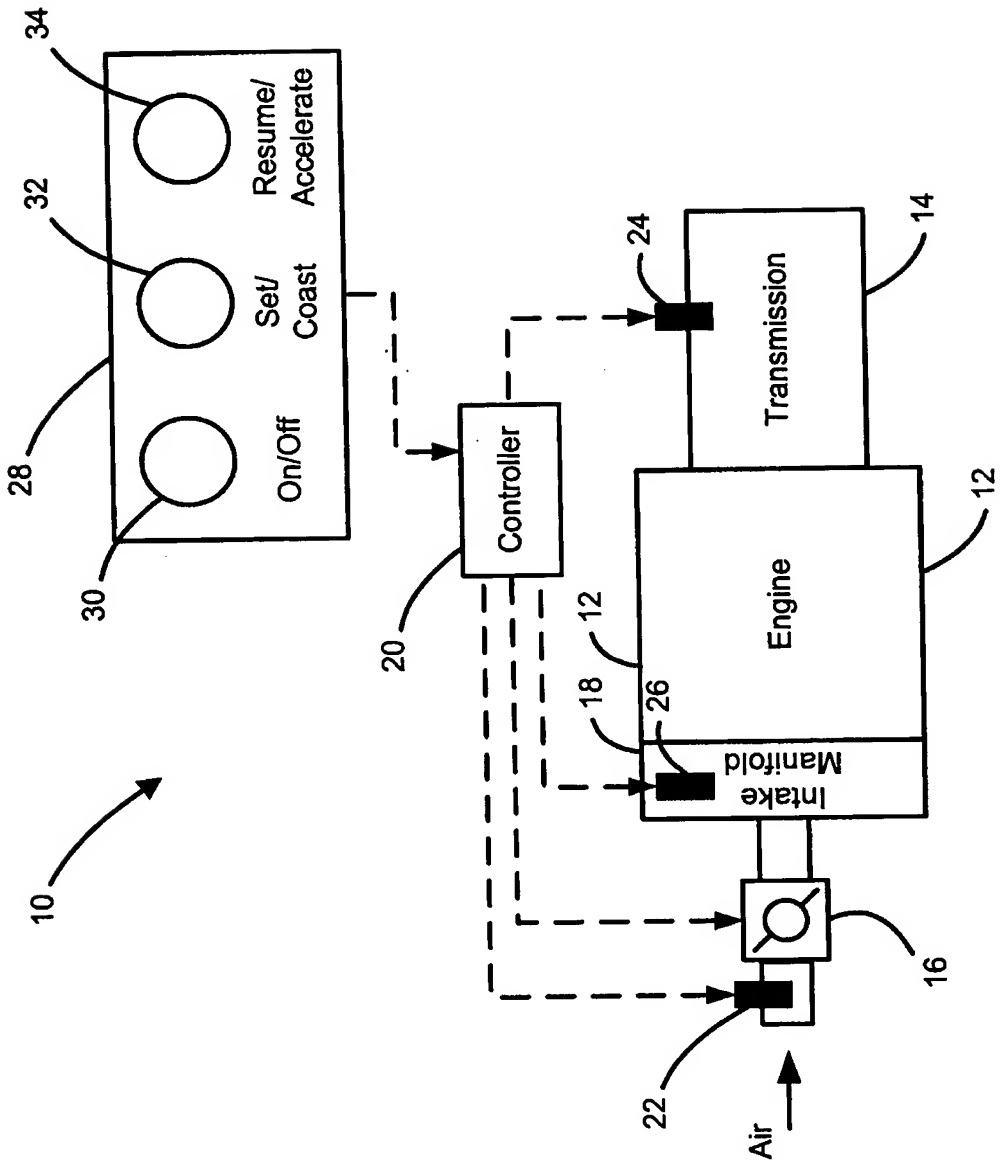

34
32
28
30
Resume/
Accelerate
Set/
Coast
On/Off
Controller
20
24
Transmission
14
12
Engine
12
18
26
Intake
Manifold
10
16
22
Air

Figure 1

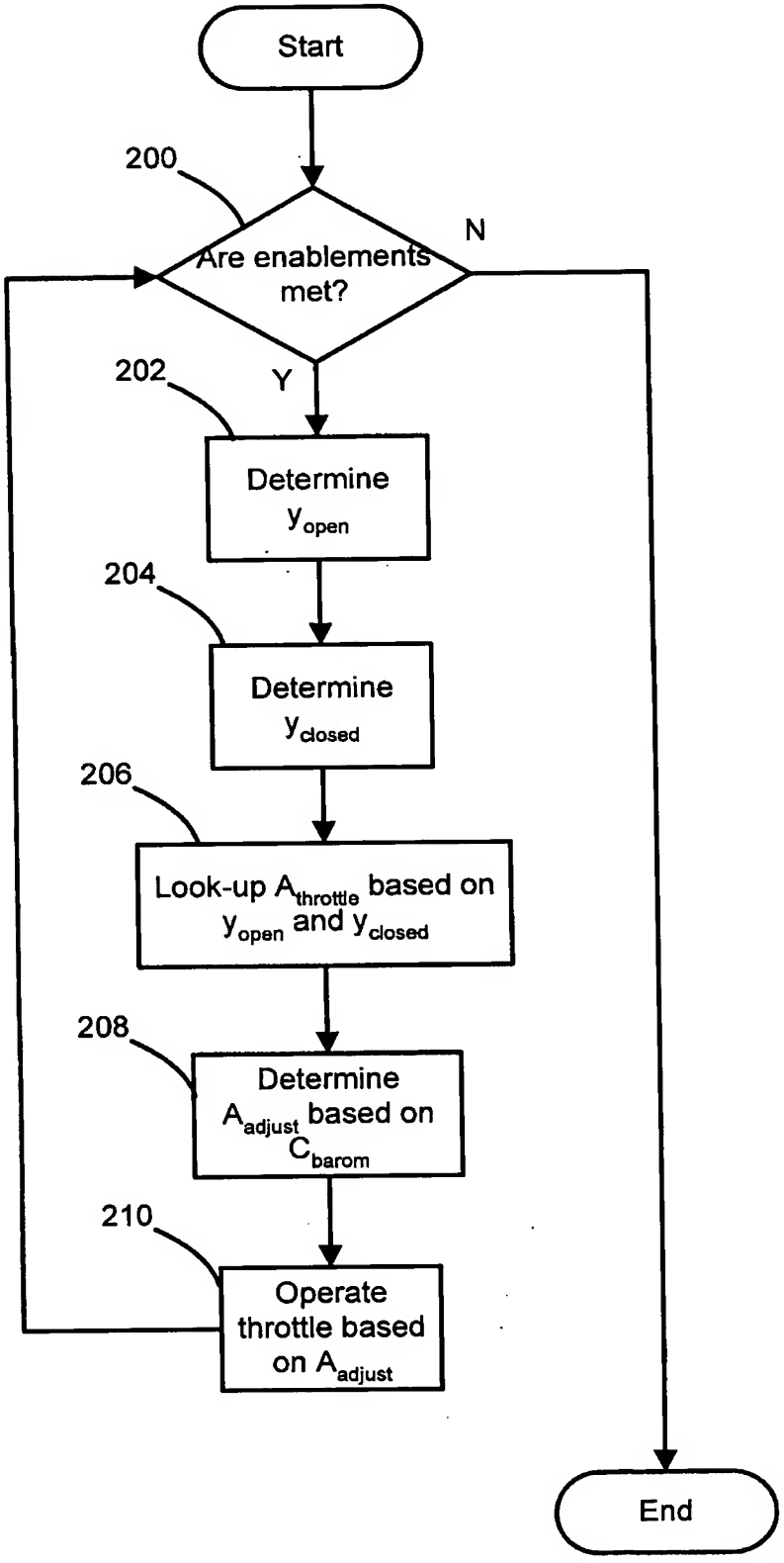

Start
200
Are enablements met?
N
Y
202
Determine y_{open}
204
Determine y_{closed}
206
Look-up $A_{throttle}$ based on y_{open} and y_{closed}
208
Determine A_{adjust} based on C_{barom}
210
Operate throttle based on A_{adjust}
End

Figure 2

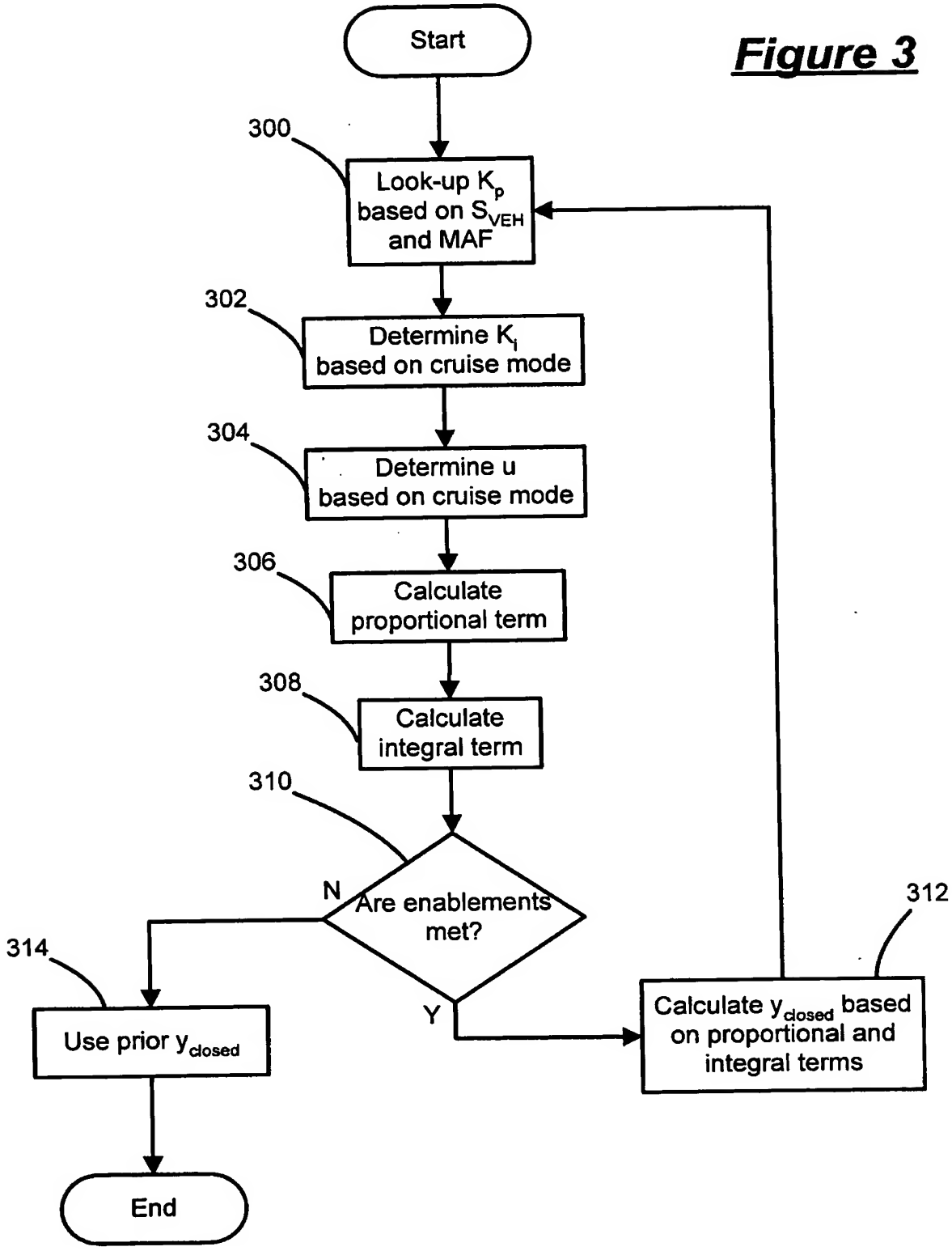

Start
300
Look-up K_p based on S_{VEH} and MAF
302
Determine K_i based on cruise mode
304
Determine u based on cruise mode
306
Calculate proportional term
308
Calculate integral term
310
Are enablements met?
N
Y
312
Calculate y_{closed} based on proportional and integral terms
314
Use prior y_{closed}
End

Figure 3

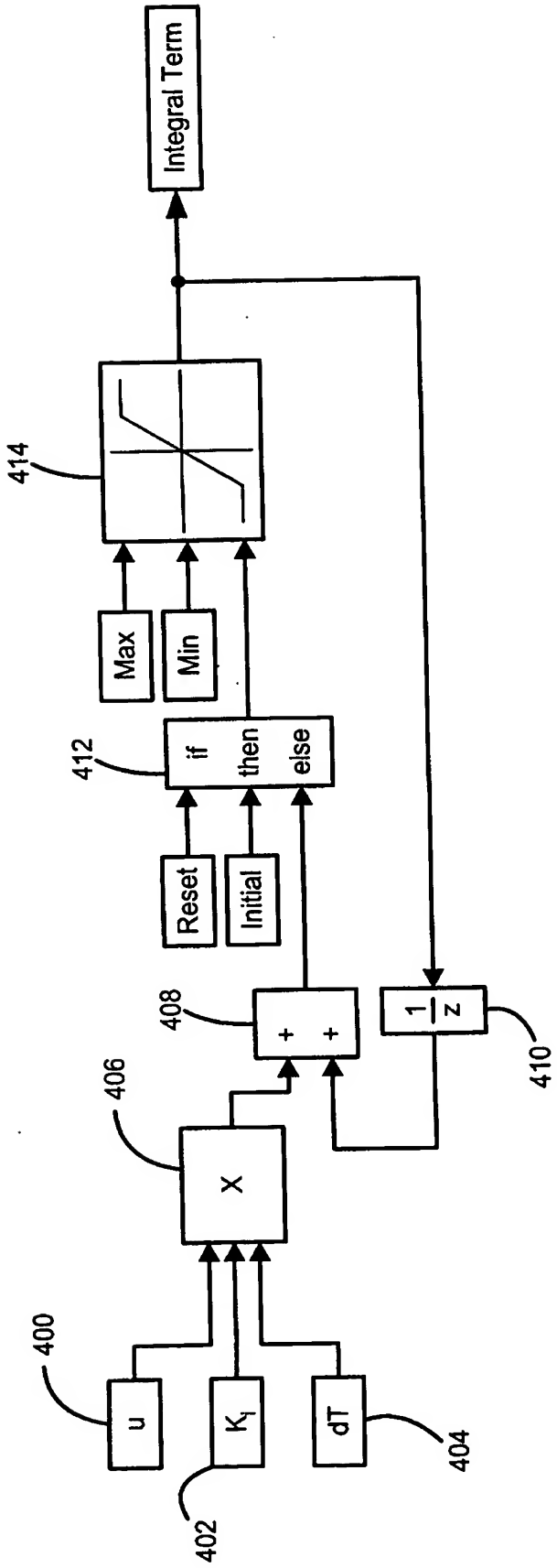
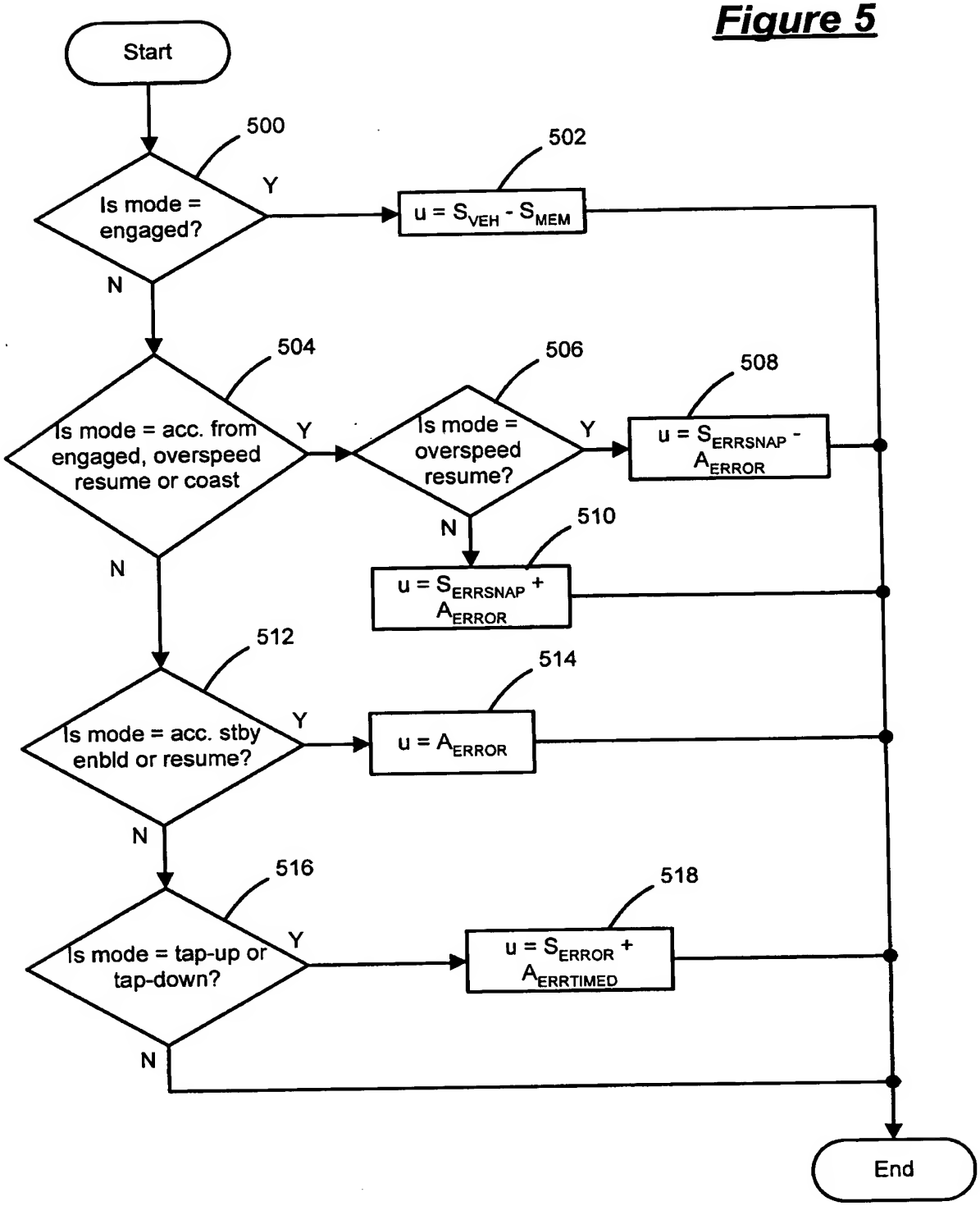

Integral Term
414
Max
Min
412
if
then
else
Reset
Initial
408
+
+
1/z
410
406
X
400
u
K_I
dT
404
402

Figure 4

Figure 5


Start
500
Is mode = engaged?
Y
502
u = S_VEH - S_MEM
N
504
Is mode = acc. from engaged, overspeed resume or coast
Y
506
Is mode = overspeed resume?
Y
508
u = S_ERRSNAP - A_ERROR
N
510
u = S_ERRSNAP + A_ERROR
N
512
Is mode = acc. stby enbld or resume?
Y
514
u = A_ERROR
N
516
Is mode = tap-up or tap-down?
Y
518
u = S_ERROR + A_ERRTIMED
N
End